

SUPPORT FOR AMENDMENTS

Claims 1 & 6 have been amended for clarity; support can be found in the original claims and in the example at page 10 of the specification. Applicants note that the subject matter of amended Claim 1 can be found in the example of the present application, which also supports Claim 18 (added in the response filed September 3, 2008). Thus, the Examiner has already considered the subject matter of present Claim 1.

No new matter has been added.

REMARKS/ARGUMENTS

On the outset, Applicants thank Examiner Stanley for indicating that Claim 18 is allowable. Applicants maintain that all of the present claims are allowable in view of the amendments and remarks presented herein.

Claims 1, 5-10, and 16 relate to antifreeze concentrates based on alkylene glycol, glycerol, 1,3-propanediol, or a combination thereof, said antifreeze concentrate comprising:

- a) from 0.05 to 10% by weight, based on a total amount of the concentrate, of tripropylene glycol;
- b) from 0.01 to 10% by weight, based on a total amount of the concentrate, of p-toluenesulfonamide;
- c) from 0.05 to 10% by weight, based on a total amount of the concentrate, of triethanolamine; and
- d) from 0.05 to 10% by weight, based on a total amount of the concentrate, of 1H-1,2,4-triazole.

Claim 11 relates to aqueous coolant compositions comprising: water; and from 30 to 70% by weight of the concentrate of claim 1.

Claim 12 relates to method for preventing corrosion of magnesium and magnesium alloys in internal combustion engines comprising: obtaining an aqueous coolant composition of Claim 11; and contacting the aqueous coolant composition with internal combustion engines.

The rejection of Claims 1-13 under 35 U.S.C. § 103(a) in view of WO 02/08354 A1 (*Wenderoth et al.*) and Russian Publication No. SU 1838362 (*Ashikhmin et al.*) is respectfully traversed (Applicants will refer to U.S. 2003/0164470 as equivalent of *Wenderoth et al.*).

As the Examiner will note, Claim 1 has been amended to recite components tripropylene glycol, p-toluenesulfonamide, triethanolamine, and 1H-1,2,4-triazoleas, which are also recited in allowed Claim 18. The Examiner states that Claim 18 is allowable for the following reasons: “The prior art of record does not teach or render obvious claim 18 as substantially set forth, especially in view of instant component ii) 3 wt% of tripropylene glycol. The closest prior art of record, Wenderoth et al. . . teaches a minimum glycol content of 75% (Wenderoth et al. [0095]). Claim 18 is openly readable on a mixture of p-toluenesufonamide and 1H-1,2,4-triazole, based on instant component iii) 50 wt% distilled water, and based on instant monoethylene glycol, which results in a glycol content of far less than the 75% required by Wenderoth et al.” Accordingly, Applicants submit that present Claim 1 (and claims dependent thereon) is allowable in view of the cited references for the same reasons Claim 18 has been allowed in view of these references.

Furthermore, Applicants have demonstrated that the presence of tripropylene glycol results in improved corrosion resistance of various substrates. The antifreeze concentrates of present Claim 1 include, *inter alia*, from 0.05 to 10% by weight, based on a total amount of the concentrate, of tripropylene glycol. In Tables 1 and 2 of U.S. Patent Application Publication No. 2007/0034825,¹ shown below:

¹ The publication of the present application.

TABLE 1

<u>Coolant compositions tested</u>		
Components [% by weight]	Example 1	Comparative example according to WO 02/08354
Mixture of p-toluenesulfonamide, triethanolamine and 1H-1,2,4-triazole	2.5	2.5
Tripropylene glycol	3	—
Distilled water	50	50
Monoethylene glycol	Remainder	Remainder

TABLE 2

<u>Static hot corrosion test according to ASTM D 4340-98</u>		
Corrosion rate [mg/cm ² /week]	Example 1	Comparative example according to WO 02/08354
Mg AZ91 HP	-3.43	-13.40
GAlSi6Cu4	+0.25	—

Example 1 of the present application is compared with an example from *Wenderoth et al.* (“Comparative example according to WO 02/08354”) in regard to the corrosion rate for the magnesium alloy Mg AZ91 HP when these two compositions are applied (see pages 9-11 of the specification as filed). As the Examiner will note, the composition of Example 1 includes 3 wt% of tripropylene glycol, while the composition of the comparative example, excluding the tripropylene glycol, has the same remaining ingredients in the same amounts as the composition of Example 1. The corrosion rates for these two compositions are compared in Table 2, above. A much smaller rate of corrosion was observed when the inventive composition was used when compared to the composition representative of *Wenderoth et al.* Thus, Applicants have demonstrated that the presence of tripropylene glycol in the presently claimed compositions (see Claim 1) results in improved resistance to corrosion.

Neither *Wenderoth et al.* nor *Ashikhmin et al.* discloses tripropylene glycol (much less the remaining components of present Claim 1). Thus, Applicants have demonstrated an improved result in view of the disclosure of *Wenderoth et al.* Therefore, these references

would not suggest to one of ordinary skill in the art that the presence of 0.05 to 10% by weight, based on a total amount of the concentrate, of tripropylene glycol would be effective in reducing corrosion.

Accordingly, the rejection should be withdrawn.

The rejection of Claims 12 under 35 U.S.C. § 103(a) in view of *Wenderoth et al.* and *Ashikhmin et al.* is respectfully traversed. Claim 12 ultimately depends on claim 1. Thus, these references cannot affect the patentability of Claim 12 for the same reasons given above.

Accordingly, the rejection should be withdrawn.

The rejection of Claim 1 and 17 under 35 U.S.C. § 103(a) in view of *Wenderoth et al.*, *Ashikhmin et al.*, and Japanese Patent Application Publication JP-04279690 (*Kanai et al.*) is respectfully traversed. As stated above, present Claim 1 contains the same components as allowed Claim 18. Thus, these references cannot affect the patentability of Claim 1 for the same reasons that they did not affect the patentability of Claim 18. Furthermore, Applicants refer to page 10 of the Office Action, which states: (emphasis added): “However, the experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicant’s claims patentable *in the absence of unexpected results.*”

Applicants have shown that the presence of tripropylene glycol results in improved resistance to corrosion (see above). Thus, these references cannot affect the patentability of the present claims for the same reasons given above.

Accordingly, the rejection should be withdrawn.

The rejection of Claim 15 under 35 U.S.C. § 112, 2nd, has been obviated by the cancellation of this claim. Accordingly, the rejection should be withdrawn.

The objection to Claim 13 has been obviated by the cancellation of this claim.

According, the objection should be withdrawn.

Applicants submit that the application is now in condition for allowance. Early notification of such action is earnestly solicited.

Respectfully submitted,

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